

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Cancelled)

2. (Previously Presented) A system according to claim 28, wherein the lens system comprises an additional reflective element folding the second optical axis into the optical axis of the image recording device.

3. (Previously Presented) A system according to claim 28, wherein the first optical axis and the second optical axis form an angle equal to or less than 90 degrees.

4. (Previously Presented) A system according to claim 28, wherein the second optical axis and an optical axis of an image recording device form an angle equal to or less than 90 degrees.

5-6. (Canceled).

7. (Previously Presented) A system according to claim 28, wherein an image recording device is a charge coupled device.

8. (Previously Presented) A system according to claim 28,

wherein the lens system has a ratio of the optical system height divided by the diameter of the circumferential circle of the formed image less than 4, preferably equal to or less than 2.55, more preferred equal to or less than 1.7, most preferred less than 1.2;

said optical system height being the maximum projected distance on the first optical axis from any part of the optical system including lenses, filters, aperture stop, image recording device and the body thereof.

9. (Previously Presented) A system according to claim 28, wherein the height ratio of the effective lens height and the effective focal length of the lens system is less than 1.7, preferably less than 1.5.

10. (Previously Presented) A system according to claim 28, wherein the height of said body is less than 20 mm, preferably less than or equal to 10.5 mm, more preferably less than or equal to 7 mm, more preferably less than or equal to 5 mm.

11. (Previously Presented) A system according to claim 28, wherein the front lens group and the reflective element consist of a prism.

12. (Previously Presented) A system according to claim 28, wherein an additional reflective element consist of a prism.

13. (Canceled)

14. (Previously Presented) A system according to claim 28, further comprising a body further comprising means for storing, transferring and receiving electronic signals of optical information and other information to and from an external device.

15. (Previously Presented) A system according to claim 14, wherein the means for transferring and receiving electronic signals comprise a connector device having a databus interface.

16. (Original) A system according to claim 15, wherein the connector device is accommodated in an end face of said body.

17. (Previously Presented) A system according to claim 14, wherein the storage means for storing the electronic signals consist of an exchangeable memory.

18. (Previously Presented) A system according to claim 28, wherein a body further comprises means for storing electronic signals of control information for controlling the operation of an external device.

19. (Original) A system according to claim 18, which comprises means for loading the control information into the external device.

20. (Previously Presented) A system according to claim 14, wherein the means for transferring electronic signals comprise a wireless transmitter of analogue and/or digital transmission.

21. (Previously Presented) A system according to claim 14, wherein the means for receiving electronic signals comprises a wireless receiver of analog and/or digital transmission.

22. (Previously Presented) A system according to claim 28, wherein said body further comprises guiding means for its guidance in a slot.

23-27. (Cancelled)

28. (Currently Amended) A lens system comprising:

a front lens group having a first optical axis;

a back lens group having a second optical axis,

wherein a lens in the back lens group, which is closest to the front lens group, is positioned at the cut off portion of front lens ~~group; and group.~~

wherein the first optical axis is substantially parallel with a height

direction of the lens system,

wherein the second optical axis is substantially parallel with a length
direction of the lens system so that a plurality of lenses are included in the back lens group
without increasing the height of the lens system, and

wherein the back lens group includes an aperture stop having surface
substantially perpendicular with the second optical axis;

a reflective element folding said first optical axis into said second optical axis in
an angle of less than 180 degrees;

wherein at least one lens adjacent to said reflective element is a non-rotary
symmetrical lens.

29. (Currently Amended) An optical image recording system for electric
recording of optical information, the optical image recording system comprising:

a lens system and a body; and

a lens system,

wherein the lens system comprises:

a front lens group having a first optical axis;

a back lens group having a second optical axis,

wherein a lens in the back lens group, which is closest to the front
lens group, is positioned at the cut off portion of front lens group; and group,

wherein the first optical axis is substantially parallel with a height
direction of the lens system,

wherein the second optical axis is substantially parallel with a length direction of the lens system so that a plurality of lenses are included in the back lens group without increasing the height of the lens system, and

wherein the back lens group includes an aperture stop having surface substantially perpendicular with the second optical axis;

a reflective element folding said first optical axis into said second optical axis in an angle of less than 180 degrees;

wherein at least one lens adjacent to said reflective element is a non-rotary symmetrical lens.

30. (Previously Presented) A system according to claim 29, wherein the lens system comprises an additional reflective element folding the second optical axis into the optical axis of the image recording device.

31. (Previously Presented) A system according to claim 29, wherein the first optical axis and the second optical axis form an angle equal to or less than 90 degrees.

32. (Previously Presented) A system according to claim 29, wherein the second optical axis and an optical axis of an image recording device form an angle equal to or less than 90 degrees.

33-34. (Canceled)

35. (Previously Presented) A system according to claim 29, wherein an image recording device is a charge coupled device.

36. (Previously Presented) A system according to claim 29, wherein the lens system has a ratio of the optical system height divided by the diameter of the circumferential circle of the formed image less than 4, preferably equal to or less than 2.55, more preferred equal to or less than 1.7, most preferred less than 1.2;

said optical system height being the maximum projected distance on the first optical axis from any part of the optical system including lenses, filters, aperture stop, image recording device and the body thereof.

37. (Previously Presented) A system according to claim 29, wherein the height ratio of the effective lens height and the effective focal length of the lens system is less than 1.7, preferably less than 1.5.

38. (Previously Presented) A system according to claim 29, wherein the height of said body is less than 20 mm, preferably less than or equal to 10.5 mm, more preferably less than or equal to 7 mm, more preferably less than or equal to 5 mm.

39. (Currently Amended) A system according to claim 29, wherein the front lens group and the reflective element consist of a prism-prism, ~~wherein an additional reflective~~

~~element consists of a prism.~~

40. (Previously Presented) A system according to claim 29, wherein an additional reflective element consists of a prism.

41. (Canceled)

42. (Previously Presented) A system according to claim 29, wherein said body further comprises means for storing, transferring and receiving electronic signals of optical information and other information to and from an external device.

43. (Previously Presented) A system according to claim 42, wherein the means for transferring and receiving electronic signals comprise a connector device having a databus interface.

44. (Previously Presented) A system according to claim 43, wherein the connector device is accommodated in an end face of said body.

45. (Previously Presented) A system according to claim 42, wherein the storage means for storing the electronic signals consist of an exchangeable memory.

46. (Previously Presented) A system according to claim 29, wherein the body

further comprises means for storing electronic signals of control information for controlling the operation of the external device.

47. (Previously Presented) A system according to claim 46, which further comprises means for loading the control information into the external device.

48. (Previously Presented) A system according to claim 42, wherein the means for transferring electronic signals comprise a wireless transmitter of analogue and/or digital transmission.

49. (Previously Presented) A system according to claim 42, wherein the means for receiving electronic signals comprises a wireless receiver of analog and/or digital transmission.

50. (Previously Presented) A system according to claim 30, wherein said body further comprises guiding means for its guidance in a slot.